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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,761	12/26/2001	Tomoaki Shino	217755US2S	1663
22850	7590	10/16/2003		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER WARREN, MATTHEW E	
			ART UNIT 2815	PAPER NUMBER

DATE MAILED: 10/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/025,761

Applicant(s)

SHINO, TOMOAKI

Examiner

Matthew E. Warren

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A-W

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 20-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 17-19 is/are rejected.
- 7) ☒ Claim(s) 2-16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

This Office Action is in response to the Election filed on July 24, 2003.

### ***Election/Restrictions***

Applicant's election without traverse of Group I, claims 1-19 in Paper No. 6 is acknowledged.

Claims 20-29 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 6.

### ***Specification***

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Svedberg (US 4,969,023).

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In re claim 1, Svedberg shows (fig. 2a) a semiconductor device comprising a semiconductor layer (9) of a first conductivity type (N) formed in an active region (including segments 5, 4, and 6). A first gate electrode (11) is formed on the semiconductor layer via a gate insulating film (10) in a predetermined pattern. A first insulating mask (12) is formed on at least a part of the first gate electrode and a part of the semiconductor layer. A mask is considered anything that insulative that covers and protects the gate electrode. A pair of first diffusion regions (4, 6) of a second conductive type formed in the active region are not covered with the first insulating mask because portions of those regions are exposed from the mask (12). The pair of diffusion regions are positioned adjacent to the first gate electrode and are source and drain regions.

In re claim 17, Svedberg shows (fig. 2b) shows that the gate electrode (11) of figure 2a is linear because it is formed over the channel (24), which is also linear.

In re claim 18, Svedberg shows (fig. 2a) that a spacer (side portions of mask 12) is formed on a sidewall of the first gate electrode and is formed of the same material as the first insulating mask because they are a contiguous layer.

In re claim 19, Svedberg discloses (col. 3, lines (62-67) that an insulating film may be formed under the semiconductor layer.

### ***Allowable Subject Matter***

Claims 2-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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The following is a statement of reasons for the indication of allowable subject matter: the prior art references alone or in combination do not show a semiconductor device as stated in claim 2 in which the first gate electrode comprises an end portion arranged in the active region, the first insulating mask being formed on the end portion of the first gate electrode and the semiconductor layer to cross the active region along a gate length direction of the first gate electrode (in conjunction with the limitation of claim 1 that the pair of first diffusion regions of the first conductive type are not covered by the first insulating mask).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bryant et al (US Pub. 2003/0141543 A1), Mistry et al. (US 5,821,575), and Suzuki (JP 5-21795) also disclose semiconductor devices having insulating masks.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew E. Warren whose telephone number is (703) 305-0760. The examiner can normally be reached on Mon-Thurs, and alternating Fri, 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Lee can be reached on (703) 308-1690. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

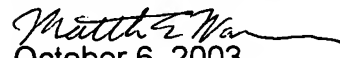
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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Matthew E. Warren

  
October 6, 2003